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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|---|---|---|---|
| 10/525,638 | 02/24/2005 | Martin Hofmeister | 27392/26949 | 2118 |

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| EXAMINER | |
|---|---|
| DESTA, ELIAS | |

| ART UNIT | PAPER NUMBER |
|---|---|
| 2857 | |

DATE MAILED: 06/19/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

| Office Action Summary | Application No. | Applicant(s) | |
|---|---|---|---|
| | 10/525,638 | HOFMEISTER, MARTIN | |
| | Examiner | Art Unit | |
| | Elias Desta | 2857 | |

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☒ Responsive to communication(s) filed on *24 February 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4)☒ Claim(s) *1-9* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1 and 4-9* is/are rejected.

7)☒ Claim(s) *2 and 3* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *24 February 2005* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *2/24/2005*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

# Detailed Action

## Claim objection

1. Claims 1-9 are objected to because of the following minor informalities:

- Claim 1 recites the limitation "the envelope curve" in page 11, line 3 and "the absolute value" in page 11, line 15. There is insufficient antecedent basis for these limitations in the claim. The remaining claims 2, 3 and 5-9 are objected to because of their dependency on the base claims.
- Claim 4 recites the word "logarithmizing", and it may have to be replaced by 'logarithm value' or with some other proper expression.

Appropriate corrections are required.

## Claim rejection – 35 U.S.C. 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) The invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. *Claims 1 and 4-9* are rejected under 35 U.S.C. 102(b) as anticipated by *Jelinek et al.* (UOS Article, 'Frequency-Domain Spectral Envelope Estimation for Low Rate Coding of Speech', hereon *Jelinek*)

In reference to claim 1: *Jelinek* teaches a method for determining an envelope curve of a modulated input signal (see *Jelinek*, page 1, abstract). The method includes the steps of:

- Generating a digital samples of a modulated input signals (see *Jelinek*, Fig. 1, input 's' to pitch analysis block is a discrete input as described in page 1, equation 2);
- Generating Fourier-transformed samples by Fourier transforming the digital samples (see *Jelinek*, page 2, Fig. 1, DFT);
- Generating sideband-cleared, Fourier-transformed samples by removing with negative frequencies or with positive frequencies from the Fourier transformed samples because the frequency in *Jelinek* is defined in a bounded range, such as <-2,2> between frequencies of adjacent harmonics as described in page 3 of equation 5);
- Generating inverse-transformed samples by inverse Fourier transforming the sideband-cleared, Fourier-transformed sample (see *Jelinek*, page 2, Fig. 1, IDFT); and
- Forming values of an absolute value of the inverse transformed samples (see *Jelinek*, page 2, Fig. 1, IDFT absolute value squared)

With regard to claim 4: *Jelinek* further teaches that the method includes taking the logarithm values of the absolute value relative to an effective value of the

inverse-transformed samples because Fig. 2 shows that envelope estimate is expressed in decibel which is a ratio or an effective value of a logarithmic factor).

With regard to claim 5: *Jelinek* further teaches that the method includes displaying the frequency distribution of the logarithmic values as a function of logarithmic levels (see *Jelinek*, Fig. 2, amplitude versus frequency curve).

With regard to claims 7-9: *Jelinek* further teaches that a method having a discrete Fourier transform and inverse discrete Fourier-transform, which are signal-processing programs, implemented in microprocessor or computer architecture.

## Conclusion

4. Citation of pertinent prior art:

- *Goeckel et al.* (IEEE Article, 'Increasing Diversity with Non-Standard Signal Sets in Wireless OFDM Systems') teaches methods of high-speed wireless communication in single and multi-carrier system employing interleaved error control coding.
- *Sciacero et al.* (U.S. Patent 6,636,048) teaches method for diagnosing performance problem in cabling.
- *Vaman et al.* (U.S. Patent 5,956,372) teaches coding system for digital transmission compression.
- *Pierzga et al.* (U.S. PAP 2002/0114270) teaches multiplex OFDM communication.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Elias Desta whose telephone number is (571)-272-2214. The examiner can normally be reached on M-Th (8:30-7:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marc S. Hoff can be reached on (571)-272-2216. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Elias Desta
Examiner
Art Unit 2857

- e.d.

June 6, 2006

MARC S. HOFF
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800